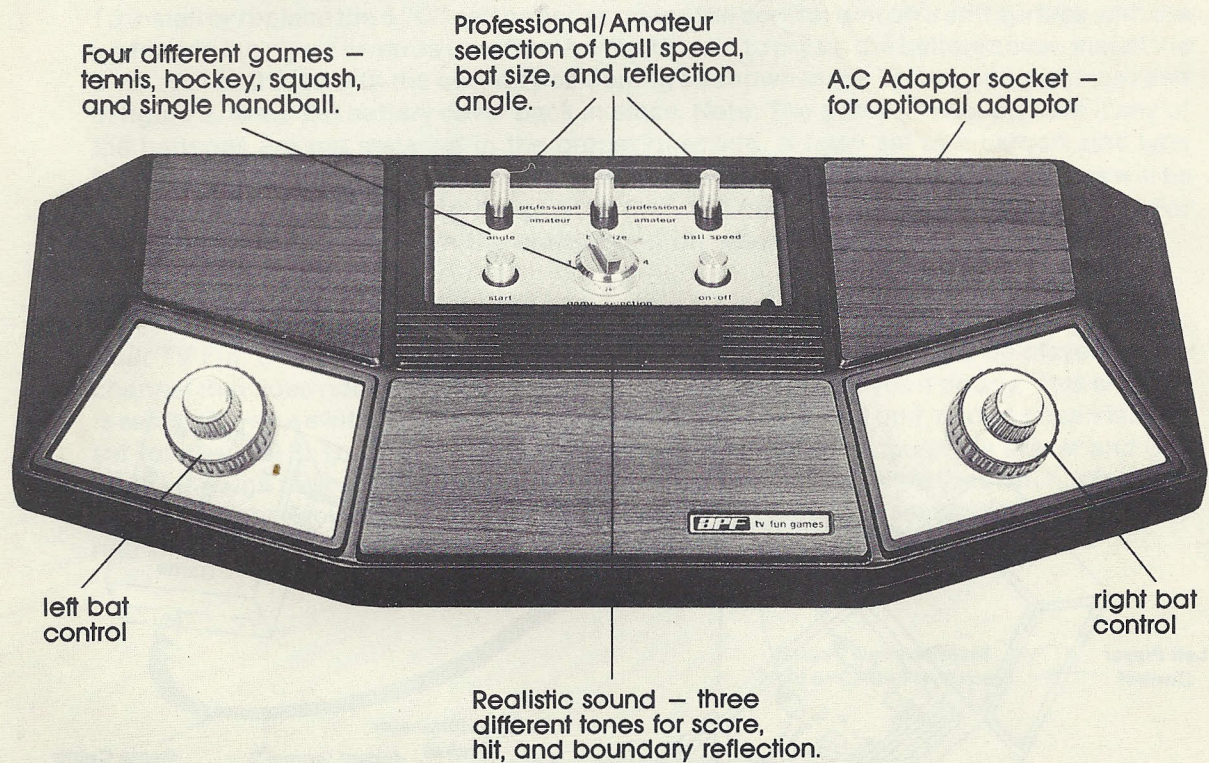


APF
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electronics inc.

tv fun[®] MODEL NO. 401

OWNER'S MANUAL



Features and Specifications

- APF T.V. FUN[®] installs in minutes to the antenna input of any size T.V. — black and white, or color.
- Switch Box allows you to play T.V. FUN or switch to regular T.V.
- 4 types of games can be played — Tennis / Table Tennis or Hockey / Football or Squash or Singles Handball.
- Designed to be played by people of all ages and skills — user can select:
 - Bat (player) size
 - Speed of ball
 - Angles of deflection
- Automatic on screen scoring, up to 15 points
- Action sound — 3 different sounds occur for a "HIT", "SCORE" and "BOUNDARY REFLECTION".
- Net and boundary lines displayed electronically on screen
- Handsome furniture styled player console — 1 or 2 players
- Operates on 6 "c" cell batteries (not included) or Optional Battery Eliminator
- Size: 16" (W) × 7.5" (D) × 3.5" (H)
- Weight: 3 lbs.

APF ELECTRONICS INCORPORATED, 444 Madison Avenue, New York, N.Y. 10022 (212)758-7550

Introduction

Your APF TV FUN model 401 is a home entertainment system, designed for the whole family. It features selection of 4 different action ball games — TENNIS, HOCKEY, SQUASH, SINGLES HANDBALL. It also allows PROFESSIONAL/AMATEUR selection of ball speed, bat size and reflection angles.

Installation is simple and TV FUN can be played on any size, black and white or color TV. Model 401 is 100% solid state and is designed to give you a highly reliable product.

Unpacking Instructions

Lift TV FUN out of its shipping carton, and remove styrofoam protection pieces. Included in the box (see fig. 1), will be the following:

- TV FUN control unit with 15 foot hookup cable attached.
- Switch box with short piece of Twin-Lead Wire

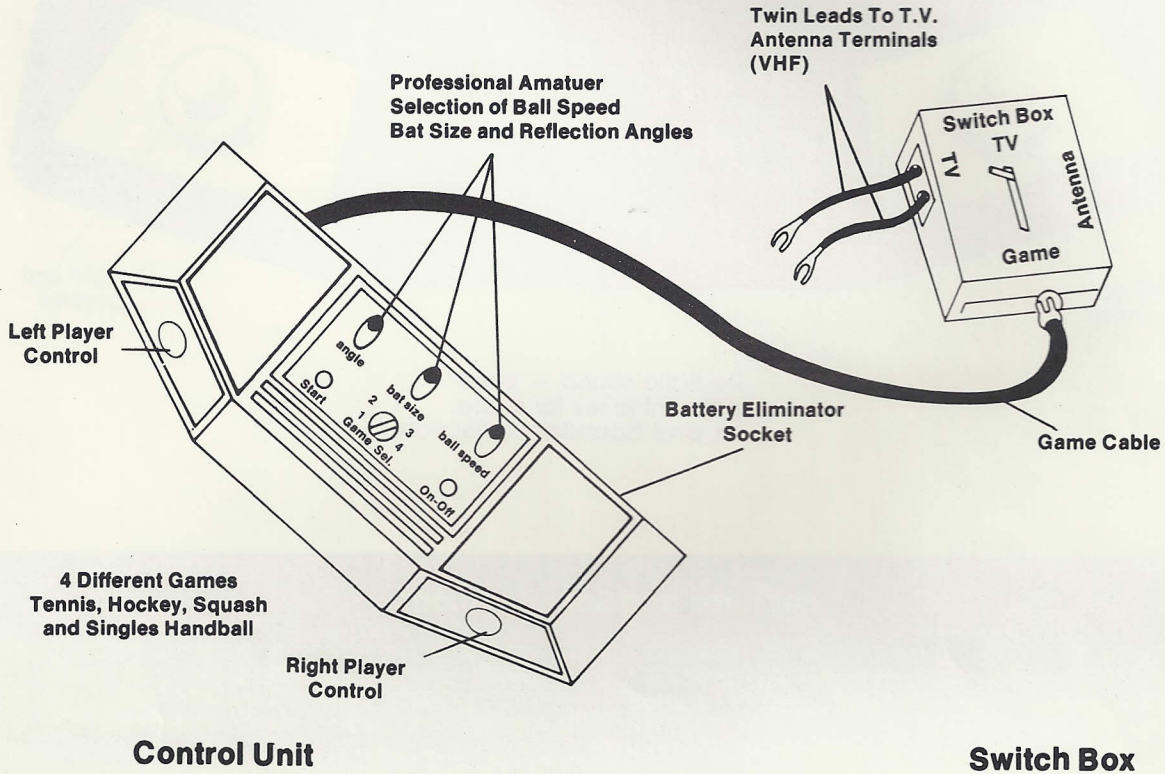


FIG. 1

Care Of Your TV Fun Unit

For best care and long use, the following points should be noted:

- Avoid poking objects or pouring liquids into the speaker openings.
- Never use any other battery eliminator (optional), other than the one specifically designed for your model unit.
- As with all fine equipment, protect your TV FUN unit from shock, dirt, dampness and abrasion. Never clean the unit with solvents such as paint thinner; use only a water dampened soft cloth.
- Avoid leaving batteries in the unit for long periods of time when not using.
- Never attempt to take any part of your TV FUN apart; this should be done only by qualified APF Service personnel.
- Avoid lifting the unit by its wires.

Installation

A. Installing Batteries:

To install or replace the 6 "C" cell batteries, place the control unit on a soft surface with the underside facing up towards you. Gently insert a coin to pry up the battery cover. Install the 6 "C" cell batteries with the correct positioning as shown in the battery compartment and in figure 2. Snap the battery cover back in place. Note: The game will not operate if any of the batteries are not installed in the proper direction. A fresh set of 6 carbon zinc type batteries will give about 40 hours of operating time. An indication of weak batteries will be a decrease in the sound, and the playing field will become unsharp and unsteady. For longest use of batteries, turn the control unit off when not playing.

B. Channel Selection

Your TV Fun unit can be viewed on either VHF channel 3 or 4. It should be played on the channel that does not receive any television broadcast, or receives it poorly. This channel is selectable by a switch located on the underside of the control unit, and has been factory set for channel 3. To change the control unit channel selector, push the eraser end of a pencil through the hole on the underside of the control unit and slide the switch. When the switch is pushed toward the front of the control unit, channel 3 is selected, and toward the rear of the control unit, channel 4 is selected. See fig. 2.

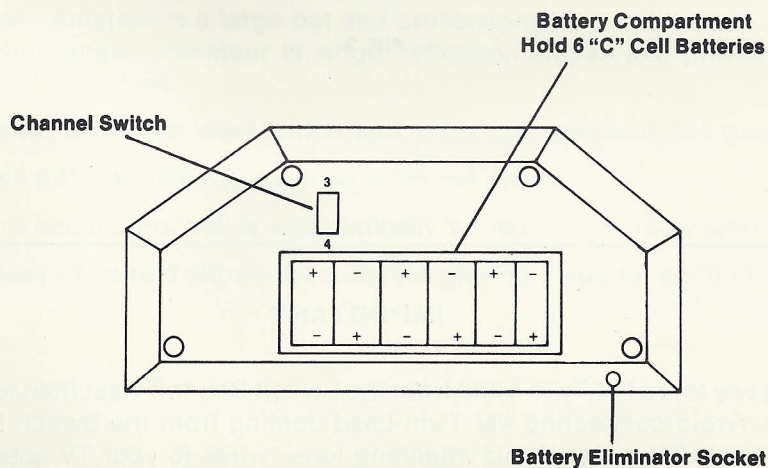


FIG. 2

C. Switch Box

The switch box allows you to watch either regular TV programs, or to play APF TV FUN. To attach the switch box: (refer to fig. 3.)

1. Make sure both the television and the TV FUN control unit's power is turned off.
2. Using a screwdriver remove the wires going to the VHF antenna input on your TV set. Connect these two wires to the antenna input on the switch box.
3. Connect the twin leadwires that are permanently attached to the switch box, to the VHF inputs of your TV.
4. Plug in the game cable (15 foot wire coming out of the control unit) into the game input of the switch box.
5. Finally peel off the adhesive protector from the switch box, and attach permanently to the rear of your TV. Note: You may remove the game wire anytime by just unplugging it from the switch box.

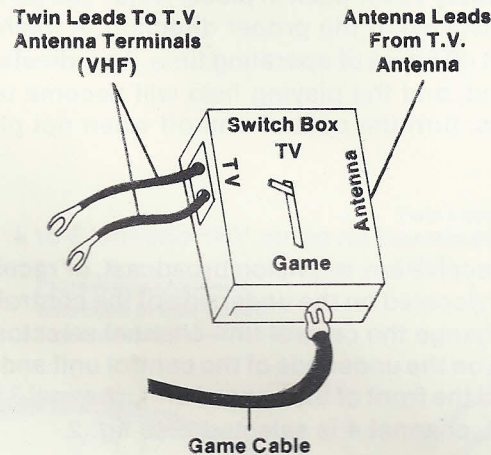


FIG. 3

IMPORTANT

Avoid using any more flat Twin-Lead from the Switch Box to TV set than is supplied with Switch Box. Avoid connecting flat Twin-Lead coming from the Switch Box to any TV antenna or cable TV outlet. Avoid attaching loose wires to your TV antenna terminals when using TV FUN. Doing any of the above may cause interference to nearby TV sets.

D. Battery Eliminator

An optional battery eliminator may be purchased for use with your TV FUN Game. This allows you to operate on household A.C. current, instead of batteries. To use the battery eliminator, turn the control unit power off, plug the eliminator into the A.C. socket, then plug the end of the wire into the battery eliminator socket on the rear of the control unit. Note: When the battery eliminator is plugged into the control unit, the batteries are automatically disconnected. To obtain the correct optional battery eliminator, either see your dealer, or use the enclosed APF accessory purchase card. **PERMANENT DAMAGE OR MALFUNCTIONS CAN OCCUR BY USING THE INCORRECT BATTERY ELIMINATOR.**

Getting Started

1. Make all connections as outlined under "installation"
2. Turn your TV on, and switch to channel 3 (or 4 if the TV FUN control unit is selected for channel 4). Turn the volume control all the way down.
3. Put the switch box to the game position. Note: To watch regular TV, turn the switch to the TV position.
4. Turn the power on by pushing the on/off button down. A red indicator will light when power is on.
5. It might be necessary to adjust the fine tuning control of your TV, to receive a clean and undistorted game picture.

Game Description

- A. There are 4 types of games that can be played with your APF TV FUN unit. All games have in common that a ball goes across the screen and it can be "hit" by the paddle or bat. When a hit occurs, the ball changes direction. When the ball is missed, the opponent's score increases. When either score reaches 15, the game is over and the ball keeps moving but will pass through the paddles.
- B. Paddle/Bat Control - Each player's paddle can be moved up or down by turning either the right or left knob on the control unit.
- C. Professional/Amateur selection - There are three independent controls to allow you to select amateur or professional status of
 - 1 - Ball Speed - Amateur is a slow speed, and professional is a faster speed.
 - or 2 - Bat size - Amateur is a large bat and professional is a small bat.
 - or 3 - Reflection angle - Amateur is single reflection angles and professional is sharp angles of reflection.
- D. To start a game, press the reset button and when you release it, the game will start.
- E. When the ball hits a boundary, it will be reflected off.
- F. When a score occurs, the ball is automatically served to the player who missed.
- G. Game selection - Figure 4 shows the different playing fields for each of the 4 games.

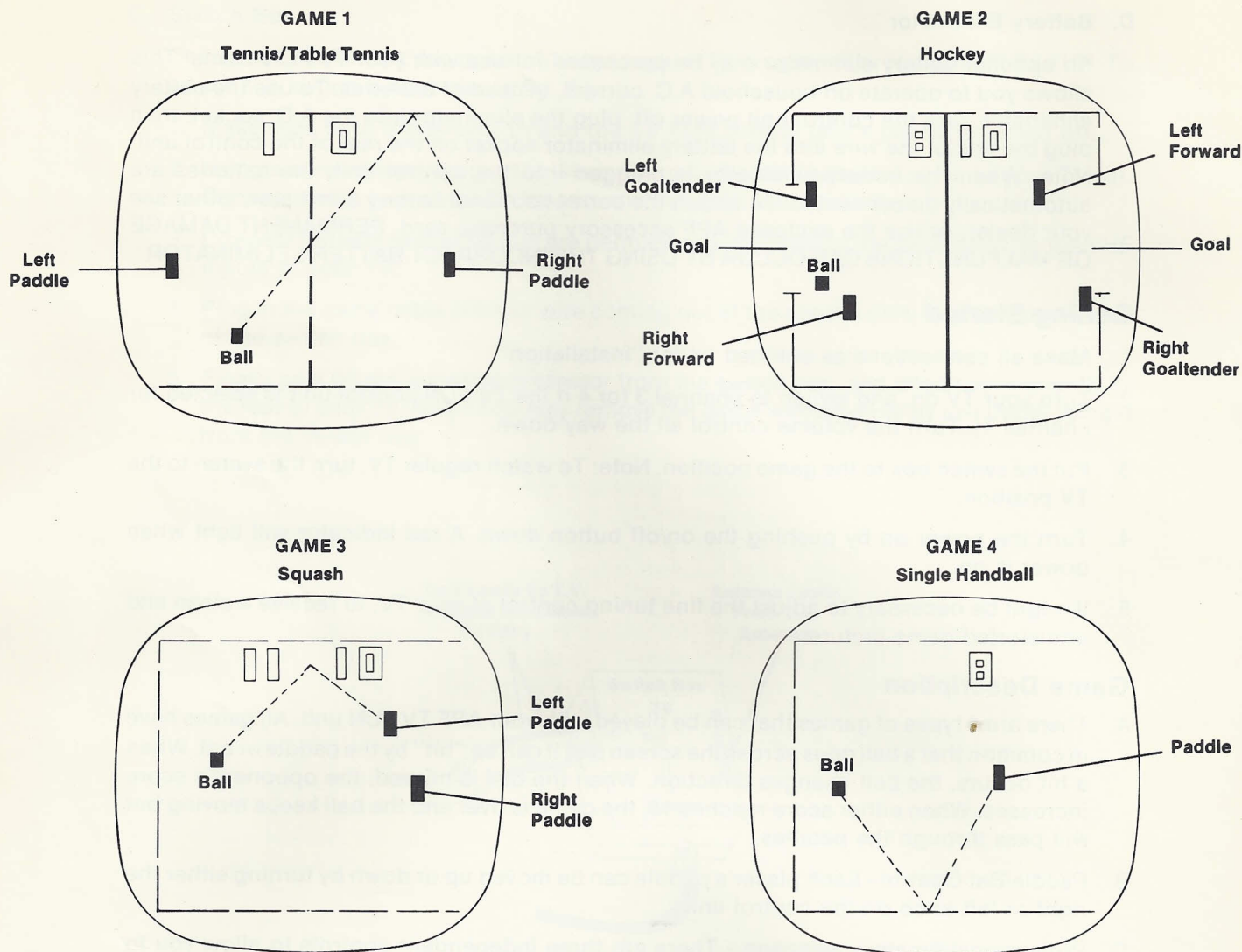


FIG. 4

Game 1 - Tennis/Table Tennis - Played like real tennis with a ball being served, returned player to player, until one player misses. Ball will reflect off of top and bottom boundaries. First player to score 15 points wins.

Game 2 - Hockey - Each player has 2 men. A goal tender and a forward. Object is to get ball into opponent's goal. The ball will pass through a forward if it is coming from that forward's side. 1st player to reach 15 points wins.

Game 3 - Squash or Doubles Handball - Played on a 3 sided handball court with both players on the right side of screen. Players hit the ball alternately until one misses. After the first player hits the ball, the other player must hit it next. (The ball will pass through the first player's racket if he attempts to hit it twice in a row). 15 points wins.

Game 4 - Pelota/Single Handball - Like game 3, but only one player. Useful for practice. 15 points ends game.

TROUBLESHOOTING CHECKLIST

Symptom	Cause and Remedy
No playfield image on TV screen or whitish-gray screen.,	Batteries low, dead, or not correctly installed. Switch Box set at "TV." Change to "GAME." Game Cable not properly plugged into Switch Box Channel selector in control unit is on wrong channel. Twin-lead Wire not properly attached to rear of TV. Battery Eliminator unit not plugged into wall and/or Control Unit. On/Off Switch not pushed to "ON" position. Adjust TV for Tuning Control.
No regular TV programs.	Switch Box set at "GAME." Change to "TV." Antenna wire not properly attached to 300 OHM screws on Switch Box. Twin-Lead Wire not properly attached to rear of TV.
Buzzing sound from loudspeaker.	Television volume on too loud. Turn volume control down.
Playfield image clear and sharp, but bars or lines move across screen.	Local TV station broadcasting on same channel as TV FUN is operating on. Change Channel Switch in Control Unit to other channel. (see page 3) Cable TV or community antenna leads in room or nearby are carrying both channel 3 and 4 programs.
Playfield fuzzy like weak TV station signal.	Poor connections at antenna terminals of TV set or Switch Box. Adjust fine tuning control on TV set.
Playfield unsharp, unsteady.	TV set not fine-tuned for best picture. Adjust horizontal control on TV or adjust vertical control on TV.
TV FUN worked before, but picture suddenly unsharp, unclear or unstable.	Batteries need to be replaced or re-tune fine-tuning control on TV set.
Top and bottom borders of playfield not equal distance from top and bottom edge of TV picture tube.	Adjust vertical height control on TV set.

TO THE CONSUMER

FULL THREE MONTH WARRANTY

APF will repair, adjust and/or replace (at its option) defects in material or workmanship, without charge, for a period of three (3) months from the date of first purchase, unless caused by the unreasonable use of this product.

To obtain service under this warranty, return this product to your Dealer with evidence of date of purchase, or return it directly to APF Service, prepaid, with proof of purchase date.

LIMITED ONE YEAR WARRANTY

APF will repair, adjust and/or replace (at its option) defects in material or workmanship, without charge, for a period of one year from the date of first purchase, unless caused by the unreasonable use of this product. However, after three (3) months from the date of first purchase, charges will be made for labor at service rates in effect at time of return.

To obtain service under this warranty, return this product to your Dealer with evidence of date of purchase, or return it directly to APF Service, prepaid, with proof of purchase date.

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